Table A-20. Kentucky Sight Distance Improvement Crash Reduction Estimates

Category	Number of Estimates	Average Percent Crash Reduction
State Survey Estimates:		
Sight Distance Improvement (All Crashes)	13	26
Sight Distance Improvement for Intersection Only (All Crashes)	1	30
General Sight Distance Improvement other than Intersection (All Crashes)	4	32
Literature Review Estimates:		
Sight Distance Improvement (All Crashes)	1	30
Sight Distance Improvement for Intersection Only (All Crashes)	4	23
General Sight Distance Improvement other than Intersection (All Crashes)	11	34
Researcher's Resulting Estimates:		
Sight Distance Improvement (All Crashes)	---	30

A comprehensive study for the FHWA (Smith et. al., 1983) estimated percent crash reduction for several countermeasures. This study was based on improvements at hazardous locations. The authors emphasize the percent crash reduction estimated are not directly applicable to moderately or mildly hazardous locations. Locations where sight distance improvements were implemented (specific type of improvements unknown) resulted in the following estimated values.

Table A-21. FHWA Sight Distance Improvement Crash Reduction Estimates

Alignment Changes	Mean Percent Crash Reduction			
	Total	Fatal	Injury	Property Damage Only
Sight distance on horizontal curve	5	5	5	5
Sight distance at Intersection	50	60	50	40
Sight distance at railroad grade crossing	25	25	25	25

4. Widen Lanes or Pavement Width

Numerous researchers evaluated the effect of lane width on the number of crashes. In general, improving lane width up to widths ranging from 11 to 12 ft consistently reduced crash rates.

Based on the combined estimates resulting from a survey of 43 states plus the District of Columbia and a comprehensive literature review, Kentucky researchers developed the following estimation of percent crash reduction for the widening of travel lanes (Agent et. al., 1996).